(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 18 August 2005 (18.08.2005)

PCT

(10) International Publication Number WO 2005/075511 A1

- (51) International Patent Classification⁷: C07K 14/705, C12N 15/12, A61K 38/00, G01N 33/50
- (21) International Application Number:

PCT/US2004/025247

- (22) International Filing Date: 4 August 2004 (04.08.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/540,271

29 January 2004 (29.01.2004) U

- (71) Applicant (for all designated States except US): GENEN-TECH, INC. [US/US]; 1 DNA Way, South San Francisco, CA 94080-4990 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KELLEY, Robert, F. [US/US]; 1029 San Felipe Avenue, San Bruno, CA 94066 (US). PATEL, Darshana [US/US]; 137 Bancroft Road, Burlingame, CA 94010 (US).
- (74) Agent: MURPHY, Anne, M.; Merchant & Gould P.C., P.O. BOX 2903, Minneapolis, MN 55402-0903 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated. for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT. RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: VARIANTS OF THE EXTRACELLULAR DOMAIN OF BCMA AND USES THEREOF

(57) Abstract: The present invention relates to polypeptides that inhibit APRIL and/or BAFF binding to BCMA, nucleic acid molecules encoding the polypeptides, and compositions comprising the polypeptides. The present invention also relates to methods for treating an immune-related disease or cancer using the polypeptides and compositions of the invention. The present invention also relates to methods for identifying inhibitors of APRIL/BAFF binding to BCMA and APRIL/BAFF signaling.

5/075511 A1